## PROGRESS

OF

## MEDICAL SCIENCE

## MEDICINE

UNDER THE CHARGE OF

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A New Instrument for Percussion and Auscultation,-In the continual struggle for accuracy in methods of physical diagnosis, TORNAL (Wien, klin, Wehnschr., 1916, xxix, 1625) describes an instrument which he considers a distinct advance in the field of auscultation and percussion. It is a modification of an earlier apparatus which he described in connection with "phonoscopic percussion" in 1912, and which he called at that time the "phonoscope." The new instrument is called the "novoscope," and consists essentially of a single-stemmed stethoscope hell or chest piece connected by a short piece of stethoscope tubing to a metal Y tube, the two arms of the Y being connected with the ears by rubber tubing and vulcanite olives, or by tubing and the ordinary metal stethescope ear pieces. The metal Y is conneeted to a metal head piece, such as is used with head mirrors, by means of an aluminum rod, which has a joint in its center permitting movement of the distal half of the rod upward through 180° in the vertical plane. The connection of the rod to the head band is made by a ball and socket joint which can be locked by a thumbserew. With the head piece adjusted and the ear pieces in position, locking the ball and socket joint with the rod extended in front of the examiner's head permits him to percuss, with the stethoscope bell just above the percussing fingers, and the examiner listens to the percussion sounds through the medium of the stethoscope. Loosening of the ball and socket joint on the head piece converts the instrument into an easily usable stethoscope for auscultation. The writer contends that percussion tones are heard much better by this method, which enables

finer distinctions to be made in the pitch and quality of the percussion notes, so that greater accuracy is secured in the percussion of the chest and its contents. He states that very light percussion strokes must be used—preferably the so-called "threshold percussion"—and the patient examined in a very quiet room. The results obtained by this method of percussion in his hands are exceedingly accurate. The instrument is small and can be folded to carry in the pocket, and is so simple in design that any elever mechanic can construct one in a very short time.

Diminished Blood Platelets and Marrow Insufficiency. MINOT (Arch. Int. Med., 1917, xix, No. 6, p. 1062) discusses at length the findings in a series of cases of purpura hemorrhagica and aplastic anemia. The two conditions are often confused, and in most text-books no differential diagnosis between the two conditions is mentioned. There is also often much confusion between the chronic types of purpura hemorrhagica and hemophilia, this confusion usually arising from incomplete studies of the blood in these cases. Minot's conclusions were derived from the literature (of which he presents an extensive bibliography) and from the study of some 25 cases in the purpura hemorrhagica and aplastic anemia groups. Purpura hemorrhagica is a condition in which there is bleeding from one or more mucous membranes, often purpuric skin lesions, associated with diminished blood platelets, a delayed bleeding time, and a soft non-retractile blood clot. The coagulation time is normal or slightly delayed, rarely much delayed. The condition is more usually secondary to some recognized disease, as diphtheria or tuberculosis, and is also to be considered secondary when it appears as a symptom accompanying aplastic anemia, leukemia, bone-marrow tumors, pernicious or splenic anemia, etc. When no recognized cause can be found for its presence it is then spoken of as a disease entity--purpura hemorrhagica or Werlhof's disease. Idiopathic purpura hemorrhagica may be a disease that is acute, subacute, chronic or of an intermittent nature. A congenital and hereditary type exists. Acute aplastic anemia is a disease of unknown etiology which runs a progressively downward, fatal course of three to six weeks' duration. It occurs usually in patients between fifteen and thirty years of age. Fever frequently occurs, and there is no evidence of increased blood destruction as in pernicious anemia. It seems that whatever the cause of the disease may be its action is to inhibit the activity of the blood forming elements in the bone marrow, for at autopsy the marrow is found to be completely fatty. Near the termination of pernicious anemia, and in the course of certain infections, as sepsis, malignant endocarditis, typhoid fever, diphtheria, miliary tuberculosis, etc., aplasia or exhaustion of marrow may occur. In such instances we speak of a secondary aplastic anemia. the only difference between this form and the idiopathic aplastic anemia being that in the first type we recognize a source for the toxin formation and in the second we do not. In aplastic anemia the blood picture shows no evidence, or very little, of regeneration of the red cells, platelets or polynuclear leukocytes. The red cells may be very low in number (often 500,000 before death), and yet the color index averages 0.8 or slightly higher, and there is little or no variation in shape and very little variation in size. Polychromatophilia, stippling, blasts,